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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/751,464 | 12/29/2000 | Azeem Ahmad | 12712RRUS01U | 7150 |
| 7590 | 02/26/2004 | | | |
| Garlick & Harrison P.O. Box 670007 Dallas, TX 75367 | | | EXAMINER LEE, JOHN J | |
| | | | ART UNIT 2684 | PAPER NUMBER |

DATE MAILED: 02/26/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/751,464

Applicant(s)

AHMAD ET AL.

Examiner

JOHN J LEE

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-11 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 12-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-5 and 12-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (US Patent number 5,893,035) in view of Lundby et al. (US Patent number 6,351,650).

Regarding **claims 1 and 16**, Chen discloses that a base station transceiver system (BTS) (16 in Fig. 1) in communication with a mobile station (MS) (12 in Fig. 1) and with a base station controller (BSC) (14 in Fig. 1) (column 5, lines 36 – column 6, lines 10 and Fig. 1). Chen teaches that circuitry that defines logic to prompt the BTS (16 in Fig. 1) to transmit a signal to the BSC (14 in Fig. 1) representing a transmission's forward gain level (forward power level) (Fig. 2 and column 2, lines 61 – column 3, lines 30 where teaches the mobile sends frame quality messages (forward power levels) to the base station and the base station sends the messages to the base station controller). Chen teaches that circuitry that defines logic that prompts BTS to generate a sequence number (Fig. 6, 7) that relate to the transmission forward gain level (measured forward power levels see column 6, lines 18 – 37) and to transmit the sequence number (Fig. 6, 7) with the status signal (quality measurements see column 6, lines 18 – 37) (Fig. 2, 6, 7 and column 13, lines 13 – 67 where teaches BTS generates and transmits a code numbers

such as 1000000 that means no change in the power condition and signal quality condition to the base controller). Chen teaches that circuitry that defines logic for comparing power gain commands received from the BSC in relation to transmitted power gain levels and for adjusting the BTS's forward gain level for a subsequent transmission (column 10, lines 15 – 63, Fig. 4, 5, and column 3, lines 31 – 47 where teaches the base station controller received the messages, and analyzes and update the messages and then adjusts subsequent transmission power).

Chen does not specifically disclose the limitation “BTS represents a previous transmission forward gain level to BSC”. However, Lundby discloses the limitation “BTS represents a previous transmission forward gain level to BSC” (Fig. 2 and column 3, lines 19 – column 4, lines 30 where teaches the BTS transfers power control history (previous transmission forward gain level) to the base station controller). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Chen system as taught by Lundby. The motivation does so would be to achieve more efficient power control for forward link in wireless communication system.

Regarding **claim 2**, Chen discloses that the circuitry that defines logic for adjusting the BTS power gain level also defines logic for adjusting the BTS power gain level according to power control commands received from the MS (column 10, lines 15 – column 11, lines 10, Fig. 4, 5, and abstract).

Regarding **claim 3**, Chen and Lundby disclose all the limitation, as discussed in claim 1. Furthermore, Chen further discloses that for adjusting the BTS power gain level in a manner that power control commands received from the mobile station are not erased

(storing the power control command) as a result of the BTS receiving a power gain command from the BSC (column 8, lines 47 – column 9, lines 14 and Fig. 2).

Regarding **claim 4**, Chen and Lundby disclose all the limitation, as discussed in claim 1. Furthermore, Chen further discloses that for adjusting the BTS power gain level includes a processor coupled to communicate with a memory wherein memory includes computer instructions that define the operational logic for adjusting the BTS's power gain level (column 8, lines 47 – column 9, lines 14 and Fig. 2).

Regarding **claim 5**, Chen and Lundby disclose all the limitation, as discussed in claim 1. Furthermore, Chen further discloses that for adjusting the BTS power gain level includes logic circuitry whereby the logical operation of the circuitry is defined in hardware ((column 8, lines 47 – column 9, lines 14 and Fig. 2).

Regarding **claim 12**, Chen and Lundby disclose all the limitation, as discussed in claims 1 and 2.

Regarding **claim 13**, Chen and Lundby disclose all the limitation, as discussed in claim 1. Furthermore, Chen further discloses that receiving a first power gain command and wherein the power gain is adjusted to be a sum of a difference between the first power gain command and a forward gain value defined within the status signal (column 13, lines 34 – column 14, lines 29 and Fig. 7).

Regarding **claim 14**, Chen and Lundby disclose all the limitation, as discussed in claim 1. Furthermore, Chen further discloses that receiving a second power gain command and wherein the power gain is adjusted to be a sum of the difference between

the first and the second power gain commands (column 13, lines 34 – column 14, lines 29 and Fig. 7).

Regarding **claim 15**, Chen and Lundby disclose all the limitation, as discussed in claim 1. Furthermore, Chen further discloses that a plurality of power control commands are received from the mobile station and wherein the power gain level is adjusted responsive to the plurality of power control commands and the first power gain command (column 10, lines 15 – 63, Fig. 4, 5, and column 3, lines 31 – 47).

Regarding **claim 16**, Chen and Lundby disclose all the limitation, as discussed in claims 1 and 12. Furthermore, Chen further discloses that receiving a first two part power gain level command, the two part power gain level command including a power gain level (EIB, frame quality message) and a sequence number (EIB, frame quality message with numbers) (column 13, lines 13 – 67 and Fig. 6, 7).

Regarding **claim 17**, Chen and Lundby disclose all the limitation, as discussed in claims 13 and 16. Furthermore, Chen further discloses that the power gain level is adjusted to add the difference of the values of the power gain level specified in the first two part power gain level command and in a corresponding forward gain value (column 13, lines 13 – 67 and Fig. 6, 7).

Regarding **claim 18**, Chen and Lundby disclose all the limitation, as discussed in claims 14 and 16. Furthermore, Chen further discloses that receiving a second two part power gain level command wherein a current power gain level is adjusted by adding the difference between the commanded power gain levels of the first and second two part

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power gain level commands (column 13, lines 34 – column 14, lines 29, Fig. 7, and column 13, lines 13 – 67).

Regarding **claim 19**, Chen and Lundby disclose all the limitation, as discussed in claims 1 and 12.

Regarding **claim 20**, Chen and Lundby disclose all the limitation, as discussed in claims 13 and 14.

Allowable Subject Matter

3. Claims 6 - 11 are allowed.

Claims 6 - 11 are allowable over the prior art of record because a search does not detect the combined claimed elements as set forth in the claims 6 - 11.

As recited in independent claim 1, none of the prior art of record teaches or fairly suggests that for adjusting power gain levels for forward link transmissions for a BTS comprises transmitting a forward gain status signal to a BSC, which forward gain status signal includes a first portion defining a forward gain level and a second portion that defines a sequence number and receiving a power gain command from the BSC, which power gain command comprises a first portion defining a commanded power gain level and a second portion including the sequence number, and together with combination of other element as set forth in the claims 6 - 11. Therefore, claims 6 - 11 are allowable over the prior art of records.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Love et al. (US Patent number 6,058,107) discloses Method for Updating Forward Power Control in a Communication System.

Vanghi (US Patent number 6,393,276) discloses Mobile Station Assisted Forward Link Open Loop Power and Rate Control in CDMA System.

Baum et al. (US Patent number 6,510,319) discloses Method for Optimizing Forward Link Power Levels During Soft Handoffs in a Wireless Telecommunications Network.

Any response to this action should be mailed to:

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or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-6606 (for informal or draft communications, please label
"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(703) 306-5936**. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Nay**

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Aung Maung, can be reached on (703) 308-7745. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

J.L.
February 20, 2004

John J Lee

Nick Cousins
Primary Examiner